New Products

No.120 Direct from IDEC Corporation April 15, 2004

- *32-bit processor (faster scan time)*
- *Maximum program size: 130 blocks*
- *4 new function blocks*
- *Unlimited number of timers/counters*
- *4 x 12 character backlit display*
- *Shift registers*
- *Cursor keys can be configured as inputs*
- *Counter frequency up to 2KHz*
- *Online monitor*
- *Ladder programming*

- ***Part numbers on back page***

FL1C IDEC SmartRelay - Faster and Smarter

IDEC Corporation is proud to announce the new FL1C series, the next generation of IDEC SmartRelay, and updated programming software WindLGC version 4.0.

FL1C IDEC SmartRelay

The IDEC SmartRelay is the perfect choice to fill the gap between simple relay/timer/counter control circuits and Programmable Logic Controllers (PLCs) where higher processing and I/O counts are required. At IDEC, you can count on our **Smart Products** to provide **Simple Solutions**.

With a new 32-bit processor that provides faster scan time, double the program memory, and 130 function blocks for programming, the number of counters and timers that can be programmed into the IDEC SmartRelay is unlimited. Think of all the components that you can replace with just one IDEC SmartRelay!

It has a 4 x 12 character backlit LCD screen, shift registers, and cursor keys that can be configured as inputs. In addition, with the new memory cartridge, you can define the system security allowing for more flexibility and versatility.

Seven different base modules are available with voltage ranges from 12V DC, 24V AC/DC to 100-240V AC/DC. Each CPU module has 12 built-in I/O points (8 inputs/4 outputs), a real-time clock and calendar.

There are five available expansion I/O modules and two communication modules, which work with any FL1C series CPU. Four are combination I/O modules with 4 input and 4 output points. There are also LONWORKS® and AS-Interface communication modules, and a 2-point analog input module. Maximum I/O configuration for the FL1C IDEC SmartRelay is 24 digital inputs, 16 digital outputs, and 8 analog inputs. The IDEC SmartRelay has proven itself to be easy to use and can be programmed in minutes.

Programming Software - WindLGC

WindLGC is the software that enables you to edit, save, and print your IDEC SmartRelay programs. The upgrade to version 4.0 provides additional enhancements that allow for greater ease in using the FL1C series. New features include online monitoring, easy ladder programming, program comparison, time simulation and four new function blocks. It is as easy as clicking and linking the function blocks you need to get your program up and running. Complicated circuits can be devised using the convenient features of WindLGC. Utilize an analog signal as a set point for

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timers/counters and a decimal point for analog values. Still available is the ability to program in function blocks and to save programs in PDF or JPG format.

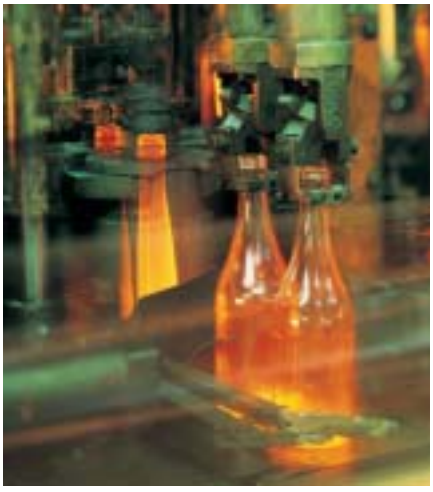
WindLGC operates on Windows® XP, ME, 2000, 98, 95 and NT platforms. To upgrade to the new version or for a WindLGC demo, go to www.idec.com. Click on Products, Software and select Downloads. You can then download the upgrade or demo free-of-charge.

Current FL1B Users

For current FL1B users, there is no need to panic. The FL1C IDEC SmartRelay is backward compatible, therefore programs written in older versions can be uploaded using WindLGC 4.0. There's no need for program conversion.

Targeted Industries & Applications

The IDEC SmartRelay can be used in almost every small task for industrial, commercial or residential applications. For example, industrial applications might include water level control, valve and pump control, conveyer systems, food processing machines or a coin-operated car wash. A commercial application might involve HVAC control, an elevator or escalator, lighting control, security systems, gate controls, window shutter/blind control or automatic door opening and closing. In a residential environment, applications might include sprinkler systems, garage door controls, ventilation systems or home lighting controls.



Industrial

- Water level controls
- Valves & pump controls
- Conveyer system
- Food processing machine
- Coin-operated car wash

Commercial

- HVAC
- Elevator & escalator
- Lighting control
- Security system
- Gate control system
- Window blind/shutter control
- Automatic door control
- Irrigation system

Residential

- Sprinkler system
- Garage door control
- Ventilation system
- Home lighting control
- Greenhouse irrigation

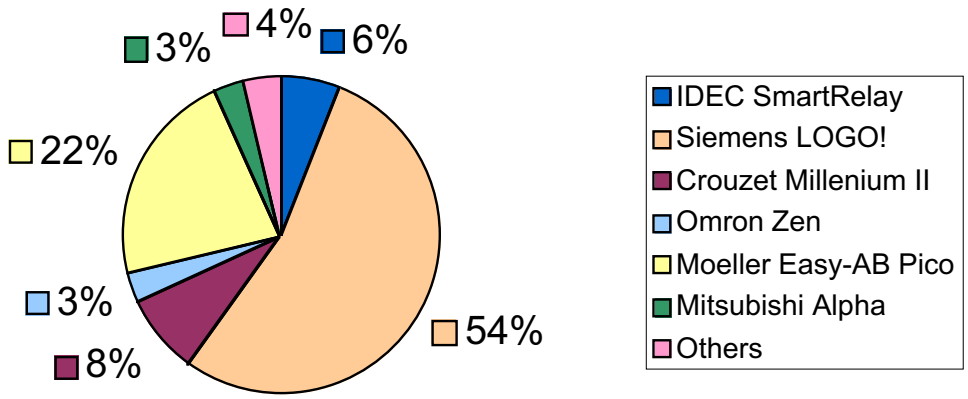
Market Information

The FL1B series has proved to be very successful for IDEC, as our sales have **doubled** in the last two years. With the new FL1C series, IDEC is in an even better position to compete and increase market share against our competitors. Siemens, who is the market leader with the LOGO product, Moeller Easy, AB Pico, Crouzet Millennium II, and Telemecanique Zelio are just a few of our competitors. IDEC takes pride in providing quality products and the FL1C is no exception. IDEC can compete with any of the brands mentioned above in functionality and pricing. See the competitive analysis chart below for more details on the FL1C's superiority over its competitors. The FL1C has more features and is more powerful than the FL1B series, but with the same price structure making it very economical. Our IDEC website at www.idec.com will provide you with more information such as features, FAQs, software downloads, CAD files, etc. Product Support is also available to answer all of your technical questions, to help with applications and to provide programming assistance. For current part numbers please see back page.

Our goal for the IDEC SmartRelay is to achieve 25% of the market share over the next three years. We estimate that the market will grow to be $20 - $25 million by that time. We are confident that by working closely together with our distributors, we will make this happen.

U.S. Market Share

(2003 approximate)



IDEC SmartRelay vs. Competitors

	IDEC SmartRelay	Crouzet Millenium II+	Siemens LOGO!	Moeller Easy AB Pico	Omron Zen	Square D Zelio
Max I/Os	48	52-XT versions	48	38	34	20
Programming Software	Function Block and Ladder	Function Block	Function Block and Ladder	Ladder	Ladder	Ladder
FM Approved Class 1, Div 2 Hazardous Locations	YES	NO	YES	NO	NO	NO
Program Size	130 Blocks 2000 Bytes	128 Blocks	130 Blocks 2000 Bytes	41 Lines	96 Lines	60 Lines
High-Speed Counter Inputs	2 KHz Max.	1 KHz Max	2 KHz Max.	NO	NO	NO
Communication Modules	LonWorks AS-Interface	Modbus AS-Interface	EIB/KNX AS-Interface	Profibus AS-Interface	NO	NO
Shift Registers	YES - 8 Max.	NO	YES - 8 Max.	NO	NO	NO
100-240V AC/DC Inputs	YES	NO	YES	NO	NO	NO

Base Modules

Part Number	Rated Voltage	Input Signal	Input Type	Output Type	With Clock	Obsolete Part Number
FL1C-H12RCE	12/24V DC	DC I7 and I8 are used for digital/analog	PNP	Relay Output	Yes	FL1B-H12RCE
FL1C-H12SND	24V DC			Transistor Source Output	—	FL1B-H12SND
FL1C-H12RCA	24V AC/DC	AC/DC	PNP/NPN	Relay Output	Yes	FL1B-H12RCA
FL1C-H12RCC	100-240V AC/DC		PNP			FL1B-H12RCC

Part Number	Rated Voltage	Input Signal	Input Type	Output Type	With Clock	Obsolete Part Number
FL1C-B12RCE	12/24V DC	DC I7 and I8 are used for digital/analog	PNP	Relay Output	Yes	FL1B-B12RCE
FL1C-B12RCA	24V AC/DC	AC/DC	PNP/NPN	Relay Output	Yes	FL1B-B12RCA
FL1C-B12RCC	100-240V AC/DC		PNP			FL1B-B12RCC

Expansion Modules

Part Number	Module	Power Voltage	Input	Output	Total I/O
FL1B-M08B2R2	Combination I/O Module	12/24V DC	DC input	Relay output	8 (4 in/4 out)
FL1B-M08B1S2		24V DC	DC input	Transistor output	8 (4 in/4 out)
FL1B-M08C2R2		100-240V AC/DC	AC/DC input	Relay output	8 (4 in/4 out)
FL1B-M08D2R2		24V AC/DC	AC/DC input	Relay output	8 (4 in/4 out)
FL1B-J2B2	Analog Input Module	12/24V DC	Analog input	—	2 (2 in/0 out)

Communication Modules

Part Number	Description	Power Voltage	I/O Points
FL1B-CL1C12	LonWorks® Communication Module	24V AC/DC	Input: 16 points Analog Input: 8 points Output: 12 points

Part Number	Description	Power Voltage	I/O Points
FL1B-CAS2	AS-Interface Module	30V DC	Input: 4 points Output: 4 points

Starter Kits

Part Number	Description
SMARTSTART-BAC-C	FL1C-B12RCC, WindLGC software, and programming cable
SMARTSTART-BDC-C	FL1C-B12RCE, WindLGC software, programming cable, and simulator switch
SMARTSTART-HAC-C	FL1C-H12RCC, WindLGC software, and programming cable
SMARTSTART-HDC-C	FL1C-H12RCE, WindLGC software, programming cable, and simulator switch

Accessories

Part Number	Description	Note
FL1C-PM3	Memory Cartridge	Memory cartridge with user defined protection feature
FL9Y-LP1CDW	Programming Software: WindLGC Ver. 4	CD w/Online Manual
FL1A-PC1	Programming Cable	
BAA1000 BNDN1000	35mm Aluminum DIN Rail, 1m/3.28ft	
BNL-6	Mounting Clips	
MT-101	Memory Cartridge Removal Tool	
FL1B-PSP1	Direct Mounting Slides	Mounts unit directly to panel
FL1B-Y137-SW8	8pt Simulator Switch	Used with 12, 24V DC Base Module Only
FL9Y-B827	FL1C User's Manual	Available for download at: www.idec.com/usa
FC4A-USB	USB to RS232 Converter	For use with "USB Only" PC's

For more information
contact your local IDEC representative
or visit us at
www.idec.com

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